

```
In [1]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
df=pd.read_csv("/home/student/Desktop/Titanic1.csv")
df
```

```
Out[1]:
```

	sex	age	sibsp	parch	fare	embarked	class	who	alone	survived
0	male	22.0	1	0	7.2500	S	Third	man	False	0
1	female	38.0	1	0	71.2833	C	First	woman	False	1
2	female	26.0	0	0	7.9250	S	Third	woman	True	1
3	female	35.0	1	0	53.1000	S	First	woman	False	1
4	male	35.0	0	0	8.0500	S	Third	man	True	0
...
886	male	27.0	0	0	13.0000	S	Second	man	True	0
887	female	19.0	0	0	30.0000	S	First	woman	True	1
888	female	NaN	1	2	23.4500	S	Third	woman	False	0
889	male	26.0	0	0	30.0000	C	First	man	True	1
890	male	32.0	0	0	7.7500	Q	Third	man	True	0

891 rows × 10 columns

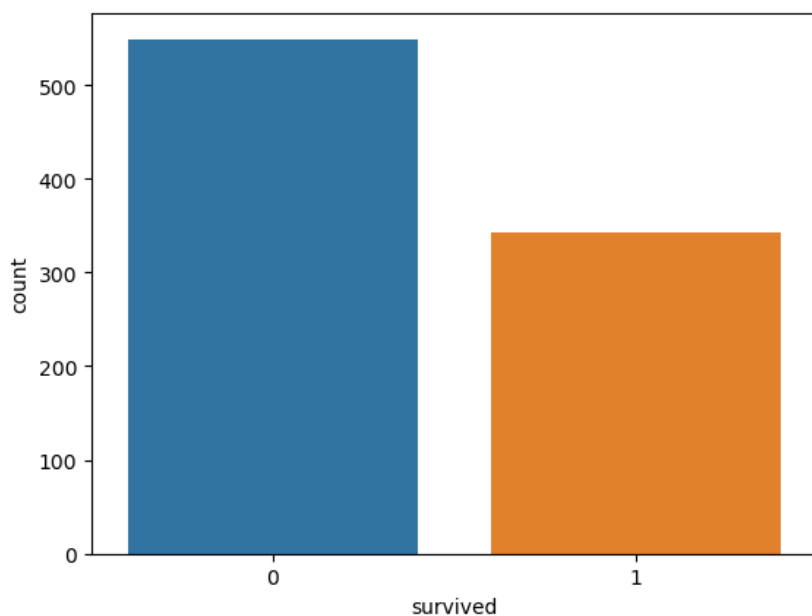
```
In [3]: from seaborn import load_dataset
tips=load_dataset("tips")
tips
```

```
Out[3]:
```

	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4
...
239	29.03	5.92	Male	No	Sat	Dinner	3
240	27.18	2.00	Female	Yes	Sat	Dinner	2
241	22.67	2.00	Male	Yes	Sat	Dinner	2
242	17.82	1.75	Male	No	Sat	Dinner	2
243	18.78	3.00	Female	No	Thur	Dinner	2

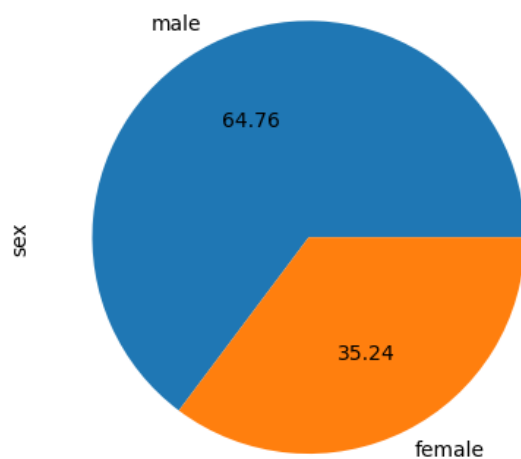
244 rows × 7 columns

```
In [7]: sns.countplot(x="survived",data=df)
plt.show()
```



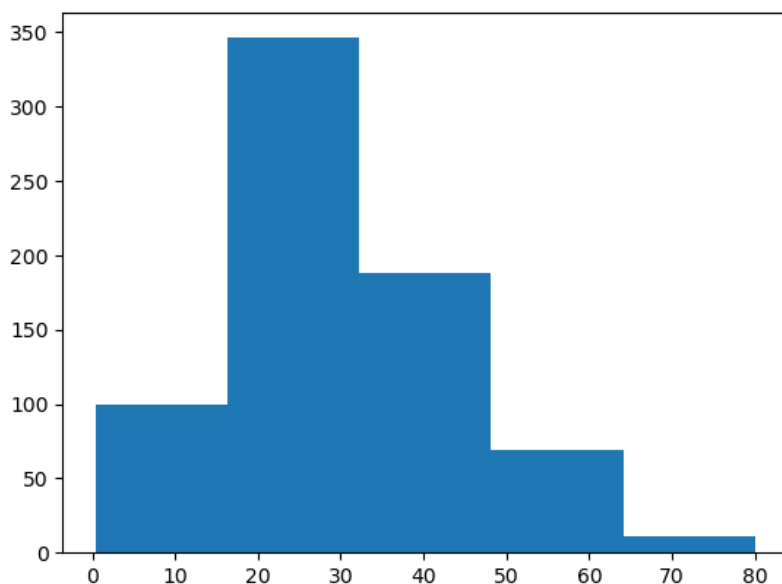
```
In [8]: df['sex'].value_counts().plot(kind="pie", autopct="%.2f")
```

```
Out[8]: <Axes: ylabel='sex'>
```



```
In [9]: plt.hist(df['age'], bins=5)
```

```
Out[9]: (array([100., 346., 188., 69., 11.]),  
array([ 0.42, 16.336, 32.252, 48.168, 64.084, 80.   ]),  
<BarContainer object of 5 artists>)
```



```
In [10]: sns.distplot(df['age'])
```

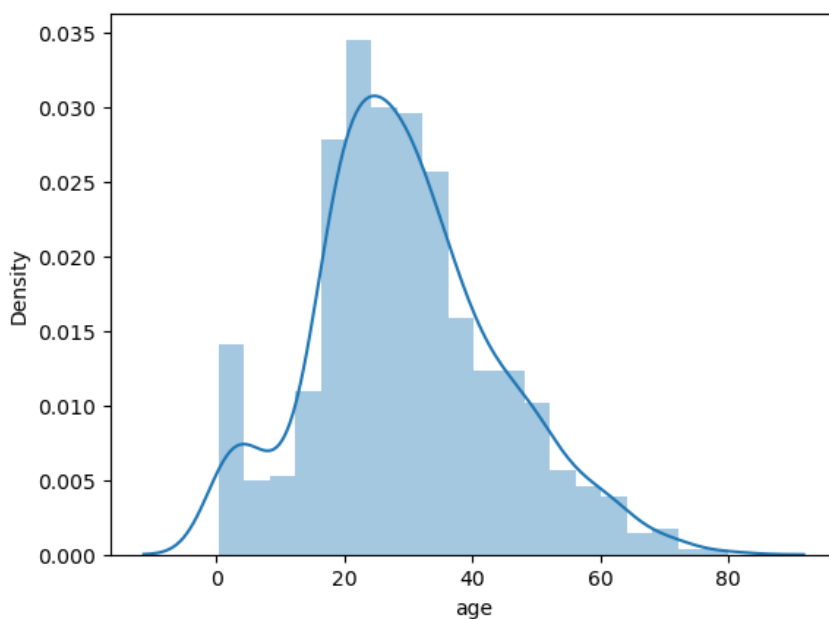
```
/tmp/ipykernel_8359/3234920688.py:1: UserWarning:
```

```
`distplot` is a deprecated function and will be removed in seaborn v0.14.0.
```

```
Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).
```

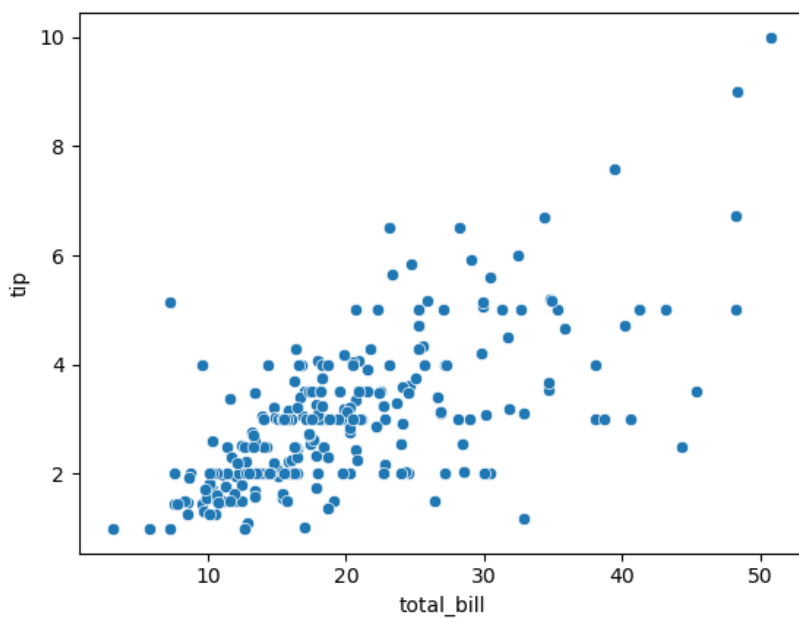
```
For a guide to updating your code to use the new functions, please see https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751
```

```
Out[10]: sns.distplot(df['age'])  
<Axes: xlabel='age', ylabel='Density'>
```

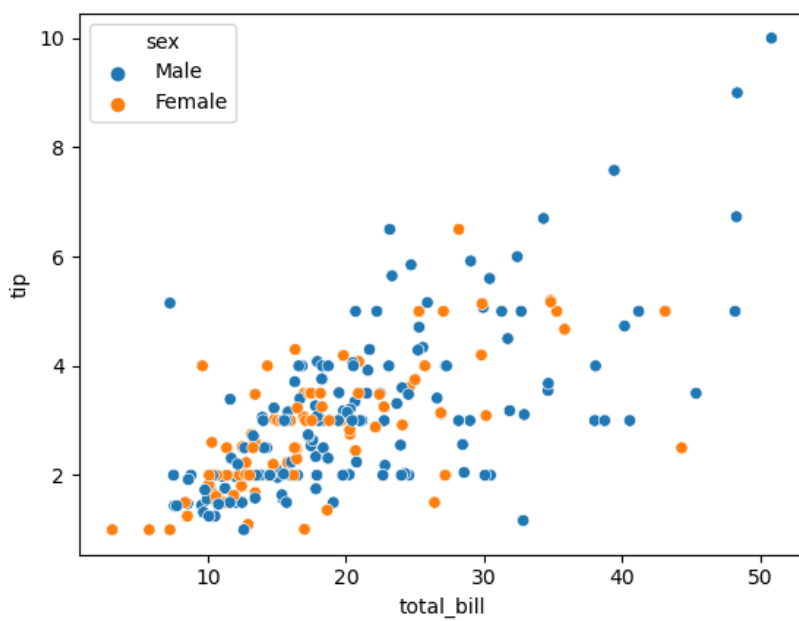


```
In [24]: sns.scatterplot(data=tips, x="total_bill", y="tip")
```

```
Out[24]: <Axes: xlabel='total_bill', ylabel='tip'>
```

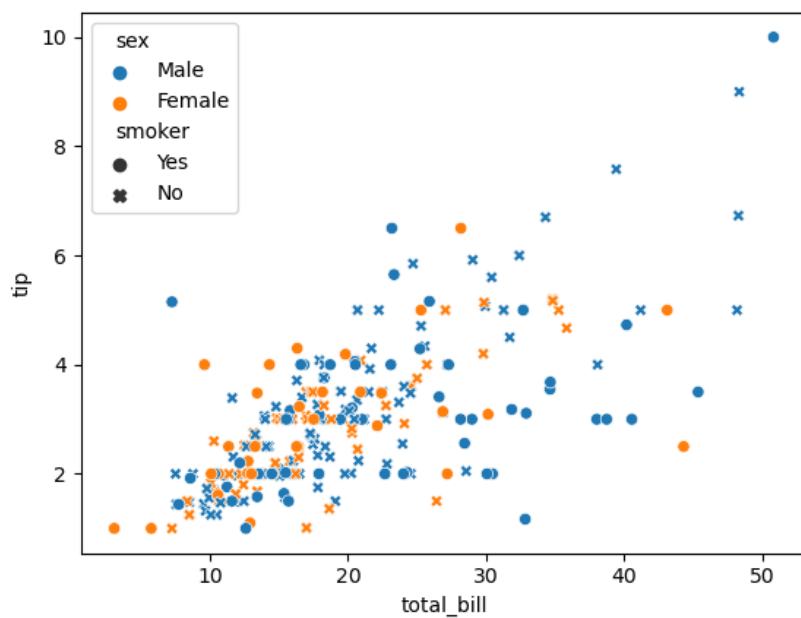


```
In [25...] sns.scatterplot(data=tips,x="total_bill", y="tip", hue="sex")  
plt.show()
```



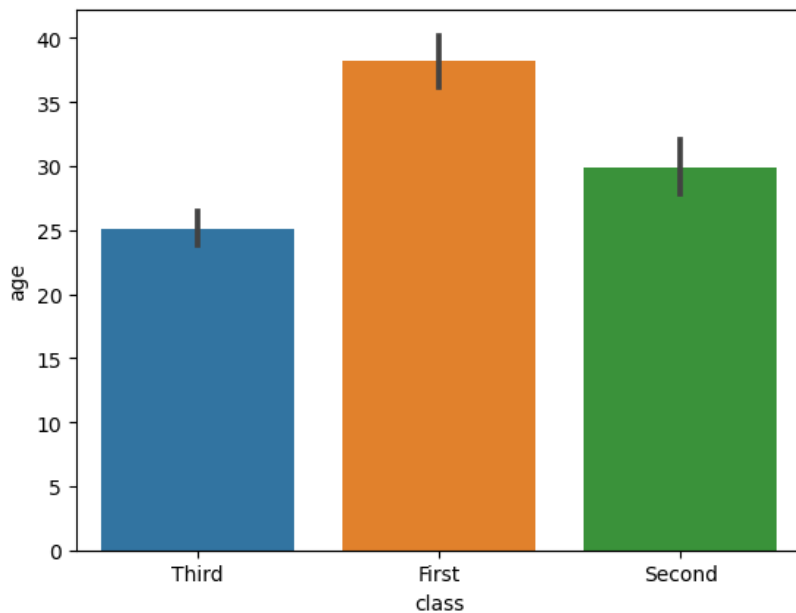
```
In [26...] sns.scatterplot(data=tips,x="total_bill", y="tip", hue="sex",style="smoker")
```

```
Out[26]: <Axes: xlabel='total_bill', ylabel='tip'>
```



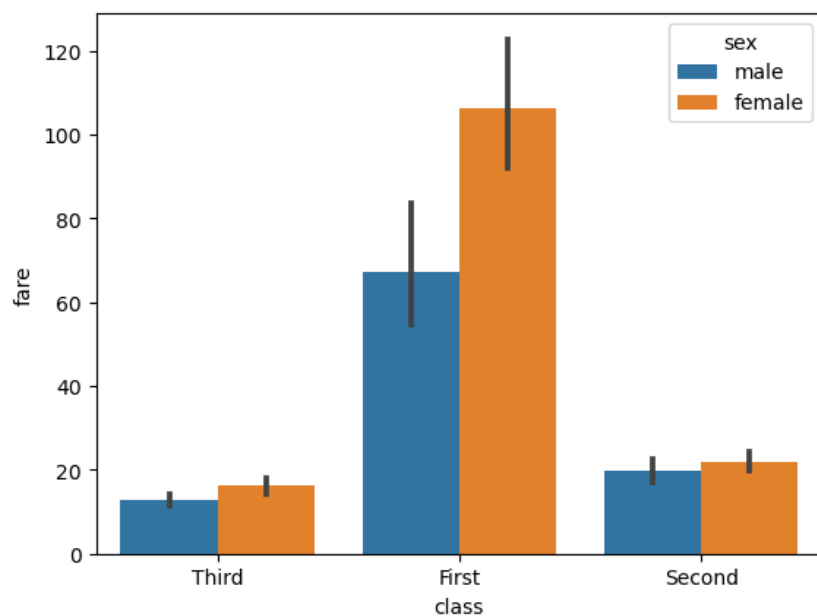
```
In [29]: sns.barplot(data=df, x="class", y="age")
```

```
Out[29]: <Axes: xlabel='class', ylabel='age'>
```



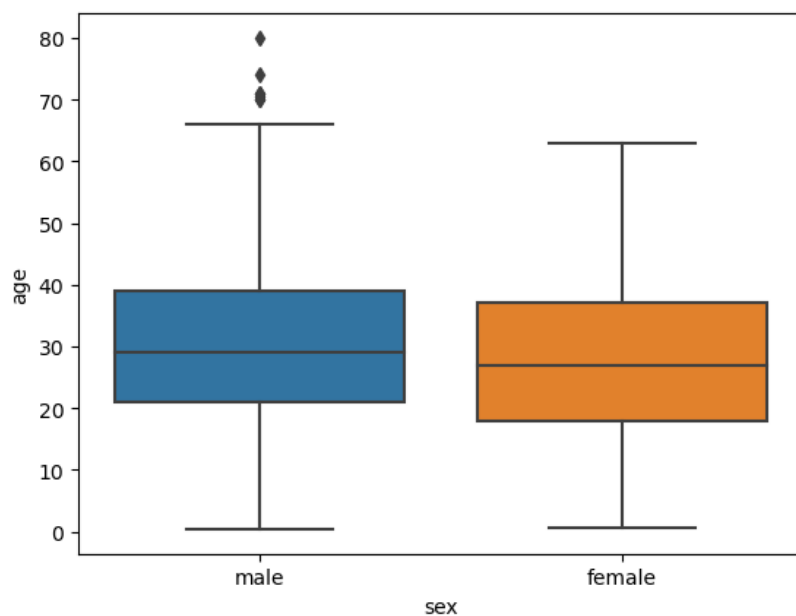
```
In [30]: sns.barplot(data=df, x="class", y="fare", hue="sex")
```

```
Out[30]: <Axes: xlabel='class', ylabel='fare'>
```



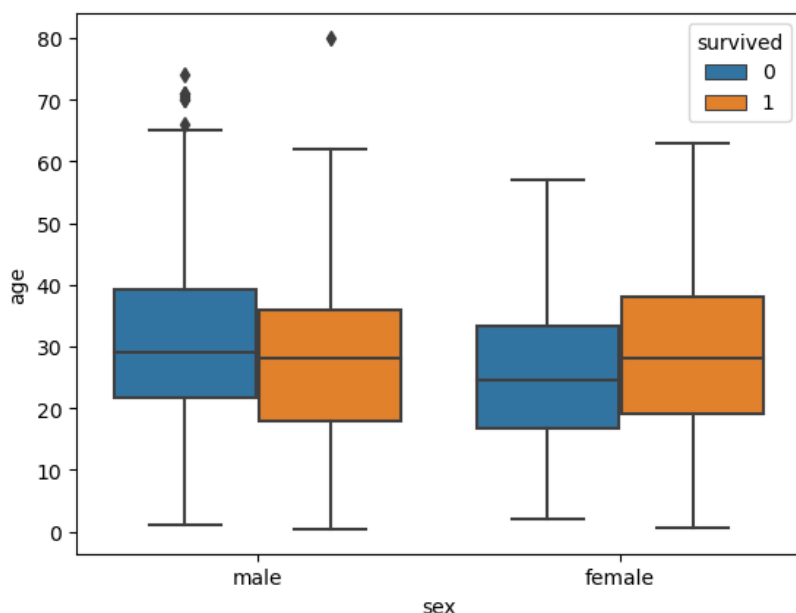
```
In [31]: sns.boxplot(data=df, x="sex", y="age")
```

```
Out[31]: <Axes: xlabel='sex', ylabel='age'>
```



```
In [34]: sns.boxplot(data=df, x="sex", y="age", hue="survived")
```

```
Out[34]: <Axes: xlabel='sex', ylabel='age'>
```



```
In [37... sns.distplot(df[df["survived"]==0]["age"],hist=False,color="blue")
sns.distplot(df[df["survived"]==1]["age"],hist=False,color="orange")
```

/tmp/ipykernel_8359/415943424.py:1: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `kdeplot` (an axes-level function for kernel density plots).

For a guide to updating your code to use the new functions, please see <https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751>

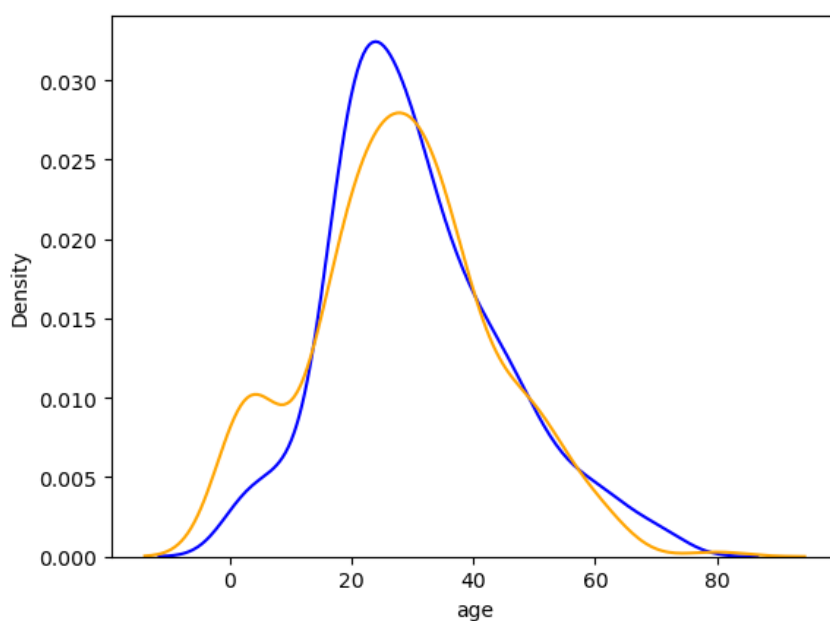
```
sns.distplot(df[df["survived"]==0]["age"],hist=False,color="blue")
/tmp/ipykernel_8359/415943424.py:2: UserWarning:
```

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `kdeplot` (an axes-level function for kernel density plots).

For a guide to updating your code to use the new functions, please see <https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751>

```
sns.distplot(df[df["survived"]==1]["age"],hist=False,color="orange")
Out[37]: <Axes: xlabel='age', ylabel='Density'>
```



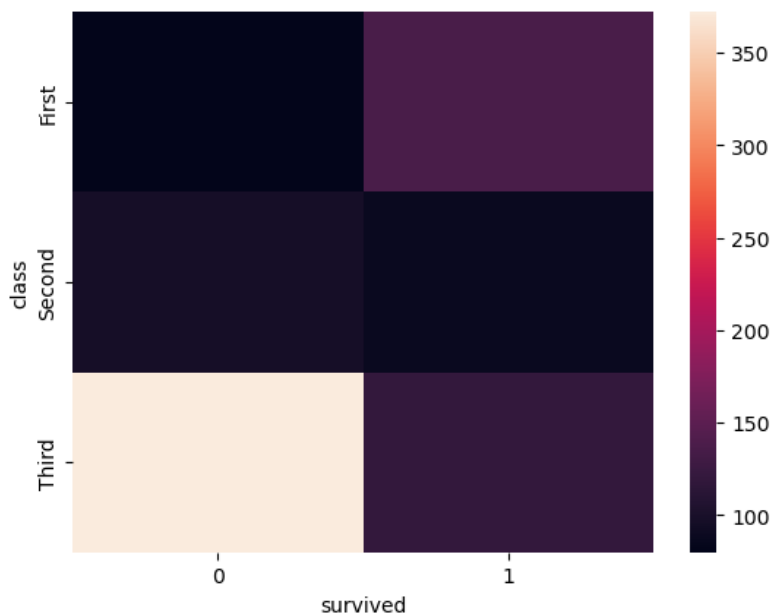
```
In [38... pd.crosstab(df["class"],df["survived"])
```

```
Out[38]: survived    0    1
```

class		
First	80	136
Second	97	87
Third	372	119

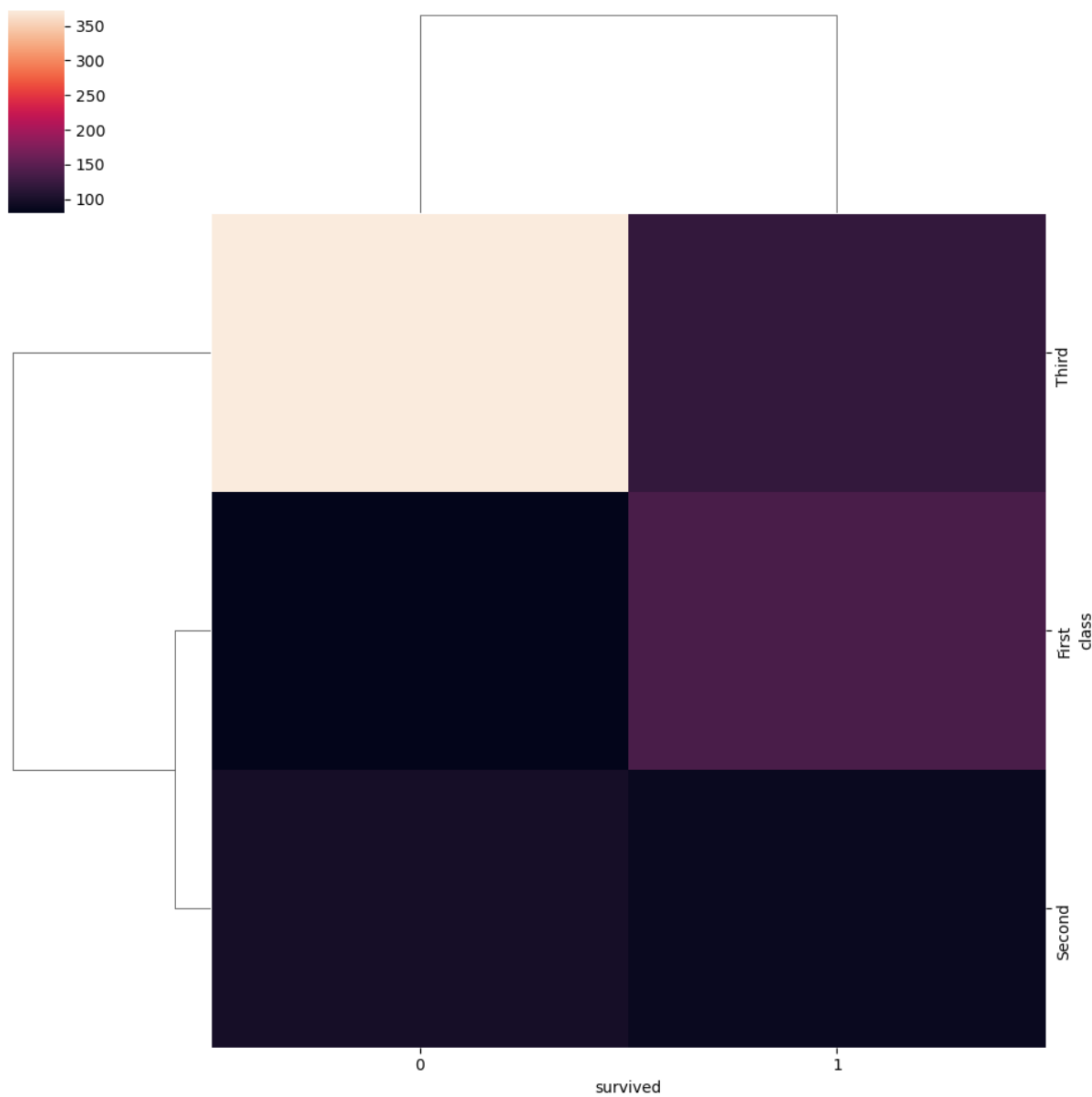
```
In [39...] sns.heatmap(pd.crosstab(df["class"],df["survived"]))
```

```
Out[39]: <Axes: xlabel='survived', ylabel='class'>
```



```
In [40...] sns.clustermap(pd.crosstab(df["class"],df["survived"]))
```

```
Out[40]: <seaborn.matrix.ClusterGrid at 0x7f3bb02c6320>
```

In []: